

GLOBAL ENERGY JUSTICE

*By Benjamin K. Sovacool & Michael H. Dworkin
Reviewed by Donna M. Attanasio**

The many law school courses, professional seminars, and speeches that address topical issues in the energy sector provide an overwhelming variety of offerings and perspectives: fuel-specific courses in oil & gas, wind, coal, nuclear, solar; practice-oriented seminars linking energy with regulation, finance, commodity-trading, climate-change, or the environment, generally; discussions that place energy in the framework of world politics, national economics, and state policy development. But where are justice and ethics? How often do we think about, or teach, a principled framework for making decisions about the production, allocation, use, costs, profits, externalities, and by-products related to energy resources?

Professors Benjamin Sovacool and Michael Dworkin place that issue front and center with their new book, *Global Energy Justice*.¹ In fewer than 400 pages, Sovacool and Dworkin analyze some of the most critical and immediate challenges facing the energy industry by applying the work of both ancient and contemporary philosophies of justice, equality, and fairness, which provides a rigorous framework for exploring the ethical and moral dimensions of energy decision-making. Using this structure, they suggest methods for weighing issues and propose specific solutions targeted to each of eight areas of injustice they identify. The book is written in a manner that makes it easily accessible to the novice and a suitable teaching text, but the book is so richly informative and thought-provoking that it is compelling reading for anyone in the energy sector, regardless of experience level. It should be mandatory reading for every decision-maker.

The authors' passion for this subject extends beyond the covers of this book. Benjamin Sovacool is the founding Director of the Energy Security and Justice Program at Vermont Law School's (VLS) Institute for Energy and the Environment. Professor Sovacool, who holds an appointment as an Associate Professor of Law at VLS and is the director of the Danish Center for Energy Technology (Center for Energiteknologier) at AU-Herning and Professor of Business and Social Sciences at Aarhus University (Århus Universitet) in Denmark, has a PhD in science and technology.² Michael Dworkin, founding

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1. BENJAMIN K. SOVACOOL & MICHAEL H. DWORKIN, *GLOBAL ENERGY JUSTICE: PROBLEMS, PRINCIPLES AND PRACTICES* (Cambridge Univ. Press, 2014).

2. *Benjamin Sovacool, biography*, AU HERNING, <http://pure.au.dk/portal/en/persons/id%28fca10105-c4eb-4f0f-99a7-a354a8a8a47a%29.html> (last visited Feb. 10, 2015).

director of the Institute for Energy and the Environment and professor of law at VLS, provides the legal perspective of both a practitioner, academic, and former chair of the Vermont Public Service Board.³ Together, they have been working to bring energy justice into the common parlance. This reviewer was first exposed to their work during a summer workshop on energy law curriculum development in which they urged professors from other schools to also consider how to make energy justice an integral part of teaching energy law.

Because this is ground-breaking work, the authors' first challenge is to define energy justice. After consideration of "justice" as a concept in other contexts, the authors propose that energy justice is "a global energy system that fairly disseminates both the benefits and costs of energy services, and one that has representative and impartial energy decision-making."⁴ Whether this definition suffices could, alone, likely justify several law review articles, but instead the authors quickly move from theory to practice by demonstrating the application and utility of an energy justice framework.

The authors deftly illustrate that the justice dilemma is deeply embedded in everyday decisions, including those often identified as operational, economic, or social problems:

- A transmission operator in Ohio must decide whether to disconnect an overloaded line, deliberately and immediately disabling electric supply to two million customers in and around Cleveland. Alternatively, the operator can try to ride it out, which if it works, preserves power for the citizens of Cleveland, but if it fails, puts upward of 50 million people in the northeastern portion of the Eastern Interconnection at risk of losing power.⁵
- The country of São Tomé must decide how to regulate the extraction of newly discovered oil reserves which have the potential to revive the economy of this tiny country that is otherwise dependent primarily on foreign aid and mired in the corruption and black-market enterprises born of poverty. But how can it protect the wealth for the benefit of all citizens, current and future?⁶
- Disconnecting the electricity of those who fail to pay bills on time, particularly during period of extreme cold or heat, can result in harm or even death, particularly to the elderly, infirm, and poor, but failing to do so burdens paying customers with the cost of "dead beats."⁷

The common thread among these scenarios is the ethical dilemma of allocating the benefits and costs of scarce energy resources, not only among the current citizens of the world, but also between living and future generations, i.e.,

3. Michael Dworkin, biography, VT. LAW SCH., <http://www.vermontlaw.edu/directory/person?name=Dworkin,Michael> (last visited Feb. 10, 2015).

4. GLOBAL ENERGY JUSTICE, *supra* note 1, at 13.

5. *Id.* at 1-2.

6. *Id.* at 288.

7. *Id.* at 223, 231.

these are energy justice challenges. Using these and similar real-world challenges, introduced in each chapter under the heading “what is reality?,” the authors then consider “what is justice?” and “what is to be done?”

- Should the Ohio transmission provider be guided by Jeremy Bentham’s principle of the “the greatest good of the greatest number” or conclude, based on Immanuel Kant’s ideas of individual freedom, that it would be unjust to deliberately deny two million people of service for the sake of possibly benefiting fifty million?⁸ How does that same argument apply when the problem concerns the production of greenhouse gases or other externalities to benefit current consumers with inexpensive electricity versus the rights of future generations who will live with the consequences?
- São Tomé’s issue was resolved by a creative law, fashioned with the assistance of Columbia University sustainability expert Jeffrey Sachs, which controlled the rate of extraction and assured the oil revenues would be collected and invested to benefit both current citizens and future generations.⁹ Sovacool and Dworkin draw a parallel between São Tomé’s challenge and solution and the issues of nuclear waste and world-scale fossil-fuel reserve depletion. Using concepts of intergenerational justice, based on the works of Ronald Dworkin, Brian Barry, and Edith Brown Weiss, they propose intriguing solutions such as natural resource funds and the concept of paying-forward with innovation and efficiency gains that provide future generations with a substitute for the currently consumed resources.¹⁰
- “A ‘contractionist’ theory of justice, one based on the idea of a social contract,” becomes the template for resolving energy poverty and access issues, ranging from the disconnection scenario referenced above, to the use of wood-burning cook stoves, to the anti-competitive application of patent law.¹¹

Whether or not the reader agrees with each of the proposed solutions, the framework enables the reader to engage with readily recognizable problems from a new perspective. Arguably, the same construct could be applied in any of a number of areas of economic injustice, including healthcare, education, food distribution, and housing. But application to the energy and climate change nexus is of particular value, the authors argue, because:

[O]ur moral systems are [...] ill-equipped to handle the complexity and expansiveness of modern-day energy and climate problems. As one sign of this, a recent study from psychologists and environmental scientists at the University of Oregon concluded that human moral systems are not well attuned to address the crisis of climate change given its complexity, the difficulty of assigning blame, and our own complicity in

8. *Id.* at 2-3.

9. *Id.* at 290.

10. *Id.* at 301-18.

11. *Id.* at 237.

causing it. They noted that cognitively, climate change is abstract, complex, and nonlinear, making it hard to predict the trajectory of future emissions pathways, and harder still to connect them with actual consequences on the ground. It becomes even more difficult when most of the impacts from climate change will occur in the future, making them temporally distant, and when those impacts are asymmetric, such as increased rainfall in some areas, and decreased rain in others. Climate change, moreover, is largely unintentional, making it relatively “blameless” and lacking features of intentional moral transgressions such as murder or cheating. . . . Lastly, climate change must overcome our guilty bias; that is, humans do not like to feel guilty, and will derogate evidence of their own role in causing a problem.¹²

Thus, the authors’ approach creates a new framework for tackling one of the greatest challenges of the present era.

Extensively researched and extremely well-documented, the book carries the reader through eight problem areas framed as energy justice issues: energy efficiency; energy externalities; human rights; due process; poverty, access and welfare; subsidies and freedom; future generations; and fairness, responsibility and climate change, each as applied to energy. The listing of the topics alone suggests the authors’ strongly held belief that our current decision-making process fails to provide adequate weight to the rights of the less economically advantaged and unborn generations. But this book should not be dismissed merely as a politically motivated tract. The argument is based on statistics and documented events, not rhetoric. Even those with opposing political views will find much meat here, in the presentation of the challenges, the analysis, and the creative and well-supported proposed resolutions.

The strength of the philosophical analytical framework is at its weakest in Chapter Three, when the authors invoke Plato’s and Aristotle’s concepts of the virtuous state, happiness, and balance to argue for greater use of energy efficiency.¹³ They argue that these concepts support six suggested solutions: electricity demand-side management, transportation demand-side management, reduction in energy intensity, energy-efficiency labeling and fuel economy standards, smarter grids and electricity pricing, and information and awareness campaigns. To muster the weight of Aristotle and Plato in support, the authors argue that an energy efficient system is a more virtuous, just, and societally desirable result than the alternatives, such as a higher return to investors.¹⁴ Therefore, actions which promote energy efficiency are most in harmony with the purpose of an energy system, which the authors state is to deliver energy efficiently and prudently.¹⁵ Although presented far more smoothly in the book than summarized here, the tautological element cannot be erased. However, even in Chapter Three, the fundamental arguments in the chapter are sound, notwithstanding that the philosophers’ contributions were, in this reader’s view, somewhat superfluous.

In contrast, the strongest, most enlightening and thought-provoking chapters are those in which competing rights of two highly sympathetic groups of

12. *Id.* at 4-5 (citing Ezra M. Markowitz & Azim F. Shariff, *Climate Change and Moral Judgment*, NATURE CLIMATE CHANGE 2 at 243-47 (Mar. 2012), available at <http://sharifflab.com/wp-content/uploads/downloads/2012/03/MarkowitzShariff2012.pdf>).

13. GLOBAL ENERGY JUSTICE, *supra* note 1, at 88.

14. *Id.* at 111.

15. *Id.* at 112.

stakeholders are pitted against one another, and the philosophically based analytical framework is a constructive methodology for enhancing the analysis. For example, how do you measure the rights and needs of today's coal miners against the rights and needs of unborn generations for clean air and water? It is in these cases that stepping back to a more theoretical view of justice helps to sort and identify the issues and better formulate a path forward.

Articulation of the ethical dimension to these challenges distinguishes this book from other well-argued policy blueprints. Unmistakably, however, it is a book about policy, not merely an academic treatise on justice. The authors build upon the eight energy injustices identified and discussed in Chapters Three through Ten to argue in Chapter Eleven for adoption of an energy justice framework that challenges us—readers, decision-makers, and society—to “embrace a different set of energy values.”¹⁶ Sovacool and Dworkin propose a hierarchy of values as the cornerstone for a just energy future: availability, affordability, due process, information, sustainability, intergenerational equity, intragenerational equity, and responsibility.¹⁷

The organizing hierarchical factors are simplicity and acceptability. Most people can readily agree that availability and affordability are desirable qualities. And indeed, across the many U.S. projects that are evaluating the “utility of the future” or the “future grid,” these two characteristics are among the most commonly cited traits that must be achieved. But the inclusion of the more complex values, particularly sustainability, intergenerational equity, intragenerational equity, and responsibility, not only present a challenge but impart urgency. The takeaway message is that justice is not a luxury, but at the root of solving the sustainability issue. How can we expect poorer nations to forego the luxuries enjoyed by the rich nations, even if the cost is to overburden the planet with greenhouse gases and destructive land use practices? Is it just to extract and combust fossil fuels and continue to produce nuclear waste to enhance the comfort of the living, affordably, and leave a depleted, contaminated planet to our grandchildren, who will not share in the benefits that we enjoy? The proposed solutions that Sovacool and Dworkin provide, and their call for each reader to take personal responsibility, are interesting, challenging and critically important messages that will linger long after you close the book.

16. *Id.* at 366.

17. *Id.* at 366-67.